ABSTRACT OF THE DISCLOSURE

Provided is a wheel bearing assembly in which a magnetized encoder (20) can withstand severe temperature condition occurring around a vehicle wheel to thereby secure a high accuracy of detection of a rotational speed. The wheel bearing assembly includes a sealing device (5) interposed between inner and outer members (1 and 2). A rotary member which is defined by one of the inner and outer members (1 and 2) is provided with a magnetized encoder (20) having a series of alternating magnetic poles of opposite polarities. The magnetized encoder (20) constitutes the sealing device (5). The magnetized encoder (20) can maintain initial magnetic characteristics as regards the single pitch deviation and the magnetic flux density under predetermined thermal endurance test condition.